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ORGANIZATIONAL AND TECHNICAL FOUNDATIONS OF LAND ACCOUNTING IN SETTLEMENTS

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Abstract: This article focuses on the ongoing reforms in land accounting and their practical implementation, particularly emphasizing the need to pay special attention to the principles of efficient use of land resources.

Keywords: Settlement, land accounting, residential areas, remote sensing, cadastral maps, and unauthorized land plots.

The ongoing reforms in land accounting and their practical implementation in our republic, particularly the focus on principles of efficient land resource utilization, are yielding positive results. In this context, on December 21, 2021, President Shavkat Mirziyoyev held a meeting to discuss the formation of land records and state cadastres, as well as the introduction of digital technologies in the sector. During this meeting, it was reported that 412,000 previously unaccounted real estate objects were added to the cadastral database, additional structures were identified in 478,000 objects, and their cadastral values were reassessed. Furthermore, numerous issues were found in the cadastral documents for roads, electricity and gas supply, water management, landscaping facilities, and areas adjacent to multi-story buildings. While the residential areas in these territories account for 223,000 hectares in the land balance, in reality, they exceed one million hectares. Consequently, a task has been set to inventory such real estate objects, create an electronic map based on the results, and make it available on an open online platform for public access. This process introduces the concept of accounting for various objects closely related to the overall territorial settlement.

When registering territories by mahalla, working groups are equipped with the following measuring and technical tools, depending on the inventory direction:

Working group for the 1st direction: GPS, Tacheometer, and Drones;

Working groups of the 2nd direction: a map printed on paper from a satellite image, a tape measure, a laser meter, and a compass.

Work will be carried out to prepare maps depicting all real estate objects, agricultural land plots, and other categories of objects located within the mahalla territory, including the boundaries of the mahalla.

Topographers will fully compile maps of MFYs (mahalla citizens' assemblies) based on all categories of data on settlement lands and real estate objects, as well as taking into account other features such as roads, ditches, streets, and others. When creating topographic maps of mahallas using UAV flights, pre-existing (Google) satellite imagery is prepared and used in field conditions for land accounting.

After examining each household or non-residential property, relevant recommendations are given to the owner or heirs of the residential premises, based on the following circumstances:

- if there are additions to the construction part compared to the cadastral passport;

- if, despite having a cadastral passport and legal basis, the property has not undergone state registration;

- in the complete absence of a cadastral passport or legal basis, and when other circumstances are identified (the process of applying through the Public Services Center as prescribed by law is explained);

When summarizing land accounting results and preparing summary data, the responsible employee must enter the daily recorded results into the database and provide daily information on the work done to the head of the working group. The entered data will be used by specialists maintaining the land balance in the formation of the land fund. Currently, the total area of the land fund of the Republic of Uzbekistan as of January 1, 2025, is 44.9 million hectares. Of this,

9.6% is irrigated agricultural land, 1.7% is rainfed land, 46.8% is desert and semi-desert pastures, and 24.9% is forest fund land. The lands of settlements are an administrative-territorial unit, and their specific features compared to the land fund categories established in our republic are that they are distinguished by their legal status and management purpose. These include lands of cities (towns) and villages, settlements established by legislation for these purposes. As of January 1, 2021, the total land area of settlements is 223.5 thousand hectares, or 0.50% of the total land area (Table 11).

Table 1

Information on land fund categories of the Republic of Uzbekistan

№	Ер фонди тоифаларининг номи	Умумий ер майдони (минг. га)
1	қишлоқ хўжалигига мўлжалланган ерлар	24057.1
2	аҳоли пунктларининг (шаҳарлар, посёлкалар ва қишлоқ аҳоли пунктларининг) ерлари	223.5
3	саноат, транспорт, алоқа, мудофаа ва бошқа мақсадларга мўлжалланган ерлар	876.3
4	табиатни муҳофаза қилиш, соғломлаштириш ва рекреация мақсадларига мўлжалланган ерлар	728.4
5	тарихий-маданий аҳамиятга молик ерлар	14.7
6	ўрмон фонди ерлари	12021.4
7	сув фонди ерлари	827
8	захира ерлар	6144
Жами:		**44892.4**

In the process of economic sector development, the distribution of land resources among various branches of the national economy takes place. Within each sector, land use is carried out by different enterprises, organizations, and institutions. Within the boundaries of certain land holdings (land users), land serves either as the primary means of production (in agriculture) or as a spatial foundation independent of its fertility, according to experts in the field. Therefore, targeted efforts are currently underway to reform settlement lands.

Table 2

Changes in land area allocated to settlement lands across the republic (thousand hectares)

T/P	Республика, шаҳар ва вилоятларнинг	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	Қорақалпоғистон Республикаси	29,7	29,8	29,8	37,1	37,1	36,7	36,6	36,4	36,2	36,4	36,8
2	Андижон	12,3	12,3	12,3	12	12	12	11,9	11,9	11,8	11,9	11,9
3	Бухоро	7,7	7,8	7,8	7,8	7,8	7,8	7,8	7,8	7,7	7,8	7,6
4	Жиззах	10,3	10,4	10,4	10,3	10,3	10,3	10,3	10,3	10,3	10,3	10,4
5	Қашқадарё	11,7	11,7	11,8	11,4	11,4	11,5	11,5	11,5	11,5	11,5	12,4
6	Навоий	15,5	15,9	15,9	15,8	15,8	15,7	15,6	15,6	15,7	15,6	15,5
7	Наманган	18,4	18,1	18,1	17,6	17,6	17,4	19,4	19,5	19,6	19,5	20,4
8	Самарқанд	15,8	19,2	19,2	19,2	19,2	19,2	19,7	19,7	19,6	19,7	19,3
9	Сурхондарё	10	10	10	10,6	10,6	10,6	10,5	10,7	10,9	10,7	11,3
10	Сирдарё	8,1	8,1	8,1	8	8	8,1	8,1	8,1	8,1	8,1	7,8
11	Тошкент	40	40	48,8	38,2	38,2	38,3	37,8	37,9	37,9	37,9	37,9
12	Фарғона	16,8	16,8	17,1	16,7	16,7	16,7	16,7	16,7	16,9	16,7	16,8
13	Хоразм	6,3	6,3	6,3	6,4	6,4	6,4	6,4	6,3	6,4	6,3	6,4
14	Тошкент ш.	17,8	9,6	8,5	8,5	8,5	8,5	8,5	8,8	8,9	8,8	9,2
	Жами	220,4	216	224,1	219,6	219,6	219,2	220,8	221,2	221,4	221,2	223,5

As can be seen from the tables and diagram above, there has been a lack of systematic approach in accounting for settlement lands, with figures for 2012-2013 not corresponding to the general trend. The increase in settlement lands from 2019 to 2021 necessitates the pre-selection of territories to be designated as settlement lands and ensuring all necessary conditions for granting settlement status. These analyses indicate the need to regulate the accounting of both the quantity and usage of settlement lands. This calls for proper organization of control measures and prevention of deficiencies and serious issues in the formation of operational information.

In conclusion, it should be emphasized that among natural resources, land allocation stands out as a material basis due to its economic potential for the population. Special attention should be paid to remote sensing of land during the monitoring and accounting of settlement lands. Remote sensing of land implies that monitoring of residential areas and accounting of buildings and structures should be carried out using satellite imagery and UAVs.

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